

ABSTRACT

A system and method for determining electrical potentials on an endocardial surface of a heart is provided. The system includes a spiral-shaped non-contact, multi-electrode catheter probe, a plurality of electrodes disposed on an end portion thereof, means for determining endocardial potentials based on electrical potentials measured by the catheter probe, a matrix of coefficients that is generated based on a geometric relationship between the probe surface, and the endocardial surface.